

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014943**Date Inspected:** 17-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

|                                    |              |    |     |
|------------------------------------|--------------|----|-----|
| <b>CWI Name:</b>                   | Gao Zhi Chun |    |     |
| <b>Inspected CWI report:</b>       | Yes          | No | N/A |
| <b>Electrode to specification:</b> | Yes          | No | N/A |
| <b>Qualified Welders:</b>          | Yes          | No | N/A |
| <b>Approved Drawings:</b>          | Yes          | No | N/A |

|                                  |     |    |
|----------------------------------|-----|----|
| <b>CWI Present:</b>              | Yes | No |
| <b>Rod Oven in Use:</b>          | Yes | No |
| <b>Weld Procedures Followed:</b> | Yes | No |
| <b>Verified Joint Fit-up:</b>    | Yes | No |
| <b>Approved WPS:</b>             | Yes | No |
| <b>Delayed / Cancelled:</b>      | Yes | No |

**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

**TOWER JETTY**

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006001

**Visual Inspection Testing (VT)**

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component designations reviewed are as follows:

**CROSS BASING CONNECTION PLATE, LIFT-2**

WD1 – GUSA3 – 3 – 77M – E – 3A/B; 4A/B

WD1 – GUSA3 – 3 – 77M – W – 3A/B; 4A/B

**Magnetic Particle Testing (MT)**

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

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### CROSS BASING CONNECTION PLATE, LIFT-2

WD1 – GUSA3 – 3 – 77M – E – 3A/B; 4A/B

WD1 – GUSA3 – 3 – 77M – W – 3A/B; 4A/B

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1B located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 6. Welder is identified as 050200.

ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 19. Welder is identified as 050289.

ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 3B located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 6. Welder is identified as 044511.

ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 41B located on Lift – 5 north tower A/E corner to Grillage plate NSD1 – TL5 – 4B/F. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

(See attached photo)

Weld joint # 24A located on Lift – 5 north tower A/E corner to Grillage plate NSD1 – TL5 – 4B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

### MEASUREMENTS ON TOWER SHAFTS AT 9M AND 13M INTERIOR DIAPHRAGMS

This QA Inspector carried out the measurements on East, West, South and North Tower Shafts to check the gap between bolt and the diaphragm connection plates. Locations were recorded on the data sheet and submitted to the assigned task leader.

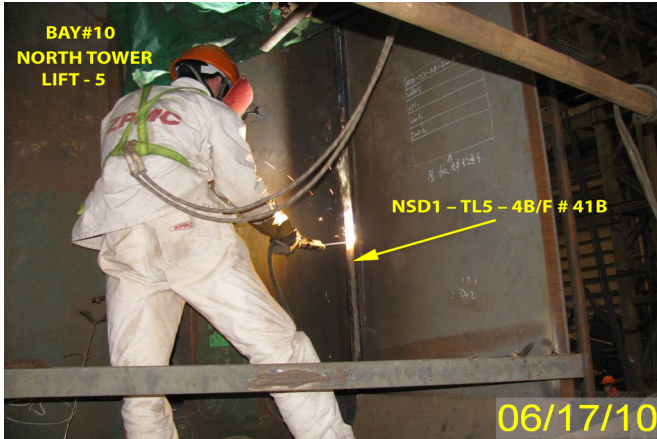
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Kumar,Sandeep    | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Clifford,William | QA Reviewer                 |

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